



# Application for Certification – Part 1 2013 Model Year

**Specific Sections** 

Test Group DMBXV03.0U2B

**Durability Group:** DMBXDPDNNPP1

**Evaporative Family:** n/a

**EPA Summary Sheet No.:** CSI-DMBXV03.0U2B

**Durability Group Description:** Diesel Cycle - Four Stroke - water cooled –

piston-diesel – direct injection Pt Oxidation Catalyst (OC) Diesel Particulate Filter (DPF)

Selective Catalytic Reduction (SCR) Catalyst

Test Group Description(s): 3.0 ltr. V6

Applicable Standards: Federal state: Tier 2 (bin 5)

Calif: LEV II (ULEV)

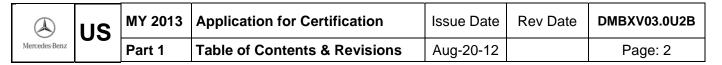
**Vehicle(s) Covered:** E350 BLUETEC (LDV/PC)

**Vehicles Tested:** Exhaust: W212DE30TC – Z0016

Evap: n/a

# **EPA Response Requested By:**

Brian Fitzgerald, 734.997.2002



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### **Revisions:**

Issue Date /	Affected Pages	Description of Changes
Revision Date		
Aug-20-12	all	Initial Version

# S-01: Correspondence

(refer to S-01 in common section for a complete list of contacts)

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<b>(A)</b>	US	MY 2013	Application for Certification	Issue Date	Rev Date	DMBXV03.0U2B
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### S-02: Durability Group Description

Please refer to the common application for certification.

## S-03: Evaporative/Refueling Family Description

### ORVR Testing Waiver per CFR § 86.1810-01 (k) + (m)

Due to the low vapour pressure of diesel fuel and the vehicle tank temperatures, hydrocarbon vapour concentrations are low and the vehicle meets the 0.20 grams/gallon refueling emission standard without a control system.

# S-04: Durability Procedure Description

Please refer to the common application for certification.

## S-05: Test Group Description

The summary sheet numbers are provided on the cover page of this application. The Test Group Description is provided in section 2 of the common application as part of the durability group description.

### S-06: Test Vehicle Description

vehicle use	car number	vehicle type	engine displ. [cm <sup>3</sup> ]	engine code	transm.	ETW [lbs]	exhaust emission control system
EDV-Ex	W212-Z0016	W212DE30TC	2987	OM642-30A	L-7	4500	DFI/TC/CAC/EGR/EGRC/OC/PTOX/SCR-U(2)/NOXS(2)/AFS
DDV-Ex	X164-889	X164DE30TC	2987	OM642-30B	L-7	6000	DFI/TC/CAC/EGR/EGRC/OC/PTOX/SCR-U(2)/NOXS(2)/AFS



### S-07: Test Results

S-07-01: Test Vehicle Information

Verify Processing Report

Total Datasets Submitted: 1

Accepted Datasets: 1

Rejected Datasets: 0

The original datasets are listed below. In addition, any information generated by the Verify system is also included. For any rejected datasets, the reason(s) the dataset was rejected is provided below in the Transaction Report for that particular dataset.

Test Vehicle Information Submission Test Vehicle Information Details Information Process Code: N EPA Manufacturer Code: MBX

Vehicle Identification Text: W212DE30TC-Z0016

Vehicle Configuration Number: 0

Vehicle Configuration Details Vehicle Description Details

Manufacturer Vehicle Configuration Number: 0

Test Group Name: BMBXV03.0U2B

Model Year: 2011

Actual Test Vehicle Make Text : Mercedes-Benz Actual Test Vehicle Model Text : E 350 BLUETEC

Vehicle Fuel Category Identifier: SF

Fuel1 Identifier : D Fuel2 Identifier : NA Test Drive Code : R

Shift Indicator Light Usage Identifier: 1 Aged Component Usage Identifier: 4

Odometer Correction Details

Correction Initial Value: 20

Correction Factor Value: 0.9909

Correction Sign Identifier: 
Correction Units Code: M

Engine Code Text: OM642-30

Engine Rated Horsepower Value: 210 Engine Displacement Value: 2.987

Air Aspiration Details

**Air Aspiration Method Identifier**: TC **Air Aspiration Device Count**: 1

Air Aspiration Configuration Identifier : N

Charge Air Cooler Identifier : A Vehicle Specifications Details Curb Weight Value : 4288

Equivalent Test Weight Value: 4500 Gross Vehicle Weight Rating Value: 5225

**NV Ratio Value**: 26.6 **Axle Ratio Value**: 2.65

Transmission Specifications Details



**Light Duty Transmission Type Identifier**: A

**Transmission Lockup Indicator**: Y

Transmission Creeper Gear Indicator: N

**Transmission Gear Count:** 7

#### Target Set Coefficient Details

Test Procedure Dynamometer Coefficients Category : C-H-E

Target CoefficientA Value: 40.777
Target CoefficientB Value: 0.39144
Target CoefficientC Value: 0.016571
Set CoefficientA Value: 19.489
Set CoefficientB Value: -0.386
Set CoefficientC Value: 0.02357

EPA Generated Test Vehicle Details

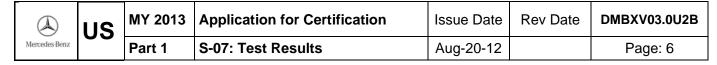
Original Receipt Date: 20100407

Adjusted Loaded Vehicle Weight Value: 4756

Loaded Vehicle Weight Value: 4588

Transaction Status Details

Transaction Status Identifier: ACCEPTED



## S-07-02: Test Results

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					•		
Manufacturer		Mercedes Benz		Manufacturer Code		MBX	
Test Group		DMBXV03.0U2B		Evaporative/Refueling l	Family	N/A	
Certificate Number		N/A		CARB Executive Order	•#	N/A	
Certificate Issue Date		N/A		Certificate Revision Dat	te	N/A	
Certificate Effective Da	ate	N/A		<b>Conditional Certificate</b>			
CSI Revision #		N/A		CSI Submission/Revision	on Date	09/26/2012	
Model Year		2013					
Гest Group Inform	ation						
CSI Type		Update for Correction		Running Change Refere	ence Number	N/A	
GHG Exempt Status		Not Exempt					
Drive Sources and	Fuel(s)						
Drive Source #1:		Combustion Engine					
	Fue	a	Basic Fuel M	etering System	Lean Burn Str	ategy Indicator	
	Dies	el	Common Rail Dir	ect Diesel Injection		**	
Hybrid Indicator		No					
Multiple Fuel Storage				Rechargeable Energy S	torage System Indicator		
Multiple Fuel Combust	ion	**		Off-board Charge Capa	able Indicator		
Fuel Cell Indicator				EPA Vehicle Class		LDV	
Federal Clean Fuel Veh	nicle	No		Federal Clean Fuel Veh	icle Standard		
Federal Clean Fuel Veh	nicle ILEV	No		California Partial Zero	Emissions Vehicle Indicat	or No	
Durability Group Name		DMBXDPDNNPP1		Durability Group Equiv		1.0	
Reduced Fee Test Grou		No		Certification Region Co		FA, CA	
Complies with HD GHO		No			(-)	5.5.25.555	
ntroduction into Comi	nerce Date			CAP2000 Conditional C	Certificate?	N/A	
ndependent Commerc	ial Importer?			Alternative Fuel Conver	rter Certificate?		
SFTP Compliance Indi	cator	Yes		SFTP Composite CO O	ption	No	
OBD Compliance Type		CARB		OBD Demonstration Ve	ehicle Test Group	BMBXV03.0U	12B
Afr Test Group Comm	ents						
Afr Exhaust / Evap Sta	andards Comments	U					
Models Covered by	this Certificate						
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockuj
Mercedes Benz	1 - Mercedes-Benz	303 - E 350 BLUETEC	Federal	2-Wheel Drive, Rear	Automatic	7	Yes
Mercedes Benz	1 - Mercedes-Benz	303 - E 350 BLUETEC	California + CAA	2 Wheel Drive Pass	Automatic	7	Yes
Mercedes Benz	1 - Mercedes-Benz	303 - E 330 BLUETEC	Section 177 states	2-Wheel Drive, Rear	Automatic	1	168



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### Certification Summary Information Report

Test Group	DMBXV03.0U2B	Ev	aporative/Refueling	Family		N/A		
Engine Description								
Hybrid Type	( <b>**</b> )	Ну	brid Description			**		
Engine Type	4-Stroke Compression Ignition	M	fr Engine Descriptio	n		***		
Engine Block Arrangement	V-shaped engine	M	fr Engine Block Arra	angement Desc	ription	-		
Camless Valvetrain Indicator	No	Oi	l Viscosity/Classifica	tion		0W-30		
Number of Cylinders/Rotors	6							
After Treatment Device(s) (A	ATD)							
ATD Number	ATD Type	ATD Preciou	s Metal	Substrat	e Material	5	Substrate Cons	truction
1	Oxidation catalyst	Platinum + Pa	ladium	Cer	amic		Monolith	1
2	Diesel Particulate Filter	Platinum + Pa	ladium	Cer	amic		Monolith	1
3	Selective Catalytic Reduction	no precious metal /	ferric oxide	Cer	amic		Monolith	1
Mfr After Treatment Device (ATD Comments	)					10		
Direct Ozone Reduction (DOR) De	vice Not Equipped							
Mfr Emission Control Device Com	ments							
Engine Configuration Numbe	er 1							
Engine Displacement (liters)	3.0	En	gine Rated Horsepo	wer		210		
Number of Inlet Valves Per Cylinde	er 2	Nu	ımber of Exhaust Va	dves Per Cylin	der	2		
Air Aspiration Method	Turbocharged	Nu	ımber of Air Aspirat	ion Devices		1		
Air Aspiration Device Configuration	n Single	CI	narge Air Cooler Typ	oe .		Air		
Cylinder Deactivation Description	N/A							
Variable Valve Timing System Desc		Va	riable Valve Lift Sy	stem		N/A		
( )	ACTION STANDARD CONTRACT	1.5	amble (m) Ching					
Number of Knock Sensors	0	0.00				****		
Air/Fuel Sensor # 1 Type	Heated air fuel	Ai	r/Fuel Sensor # 1 De	scription		N/A		
Mfr Air/Fuel Sensor Comments		Tr.	ND T				. (17)	
Exhaust Gas Recirculation	Yes	E	GR Type			Electron	ic/Electric	
Cooled Exhaust Gas Recirculation	Yes		T. 1 T.					
Closed Loop Air Injection System	No	Al	r Injection Type					
Mfr Engine Configuration Commer	nts							
Official Test Numbers								
Test Group				EPA City Litmus	EPA City Litmus	EPA Highway Litmus	EPA Highway Litmus	CREE Weighti
Fuel FTP	US06 SC03	Cold CO	Highway	Value	Threshold	Value	Threshold	Facto
Diesel BMBX10008850	BMBX10009176 BMBX10009257	BMBX10009177	BMBX10008851	21.0	20.4	30.4	30.4	N/A

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		t describer and the state of th		
Test Group	DMBXV03.0U2B	Evaporative/Refueling F	amily	N/A
Emission Data Vehicle Informa	tion			
Vehicle ID / Configuration	W212DE30TC-Z0016 / 0			
Vehicle Model				
Represented Test Vehicle Make	Mercedes-Benz	Represented Test Vehicle	Model	E 350 BLUETEC
Drive Sources and Fuel System	Details			
Drive	Source and Fuel#	Drive Source	Fuel	
	1	Combustion Engine	Diese	
	· ·			
Hybrid Indicator	N			
Multiple Fuel Storage	••	Multiple Fuel Combustion	n	
Fuel Cell Indicator	N	Rechargeable Energy Sto	orage System Indicator	N
Rechargeable Energy Storage System		Rechargeable Energy Sto	orage System, if 'Other'	
Off-board charge Capable Indicator				
Transmission Type	Automatic	# of Transmission Gears		7
Engine Code	OM642-30	Axle Ratio		2.65
Displacement (liters)	2.987	Rated Horsepower		210
Equivalent Test Weight (pounds)	4500	Air Aspiration Method		Turbocharged
Drive Mode While Testing	2-Wheel Drive, Rear	SIL Usage		Not eqipped

#### **Dynamometer Coefficients:**

**Aged Emission Components** 

Target Coefficients				Set Coefficients				
	Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	City/Highway/Evap	40.777	0.39144	0.016571	19.489	-0.386	0.02357	-

Manufacturer Test Vehicle Comments

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Test Group	DMBXV03.0U2B	Evaporative/Refueling Family	N/A
Test #	BMBX10008850	Test Procedure	2 - CVS 75 and later (w/o can. load)
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	19 - Cert Diesel 7-15 ppm Sulfur
Test Date	12/16/2009	Fuel	Diesel
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Abgashaus Untertuerkheim		
Test Results			

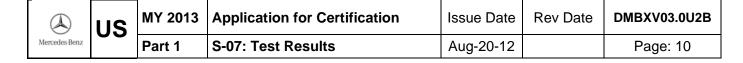
Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	448	-
Bag 1 Fuel Economy	22.7	22.7
Bag 2 Carbon Dioxide	364.2	
Bag 2 Fuel Economy	27.9	27.9
Bag 3 Carbon Dioxide	345.6	100
Bag 3 Fuel Economy	29.4	29.4
Carbon Monoxide	0.1004	
Formaldehyde	0.00016	
Manufacturer Fuel Economy	27.0067	27.0067
Nitrogen Oxide	0.0178	
Non-methane Hydrocarbon	0.00888	
Non-methane organic gas (California)	0.00888	
Particulate Matter	0.0009	
Total Hydrocarbon	0.04444	

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	376	376

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	376.49	376

**Manufacturer Test Comments** 

For cyclic regenerations of Diesel PC/LDT, MB applies an approved "Additive Adjustment Factor" (AAF).



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### Certification Summary Information Report

Test Group			DMBXV03.0U2B Evaporative/Refueling Family N/A									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fai
Fed	50,000 miles	Federal Tier 2 Bin 5	CO	0.10	:: <del>**</del>	les.	0.0047 UP	0.03		0.1	3.4	Pass
Fed	50,000 miles	Federal Tier 2 Bin 5	НСНО	0.0002			0.00001 UP	0.0		0.000	0.015	Pass
Fed	50,000 miles	Federal Tier 2 Bin 5	NMOG	0.0089	3/22	1.00	0.0006 UP	0.0022		0.012	0.075	Pass
Fed	50,000 miles	Federal Tier 2 Bin 5	NOX	0.018	-	-	0.003 UP	0.0	<del>-</del>	0.02	0.05	Pass
Fed	50,000 miles	Federal Tier 2 Bin 5	PM	0.001	8.00	1=0	0.0012 UP	0.00003	== 1	0.00	0.01	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	со	0.10	i ex	-	0.0047 UP	0.07		0.2	4.2	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	CREE	376	**		0 UP	0	221	376		
Fed	120,000 miles	Federal Tier 2 Bin 5	HC-NM+NOX- COMP	0.070	122	-	0.0036 UP	0.0055	221	0.07	0.65	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	НСНО	0.0002		1-	0.00001 UP	0.0001		0.000	0.018	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	NMOG	0.0089	1075	1.00	0.0006 UP	0.0055	-	0.015	0.090	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	NOX	0.018		155	0.003 UP	0.0		0.02	0.07	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	PM	0.001	0.00	-	0.0012 UP	0.00008		0.00	0.01	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	PM-COMP	0.001	10.12	-	0.0012 UP	0.00008	24.5	0.00	0.07	Pass
CA	50,000 miles	California LEV- II ULEV	СО	0.10		-	0.0047 UP	0.03	220	0.1	1.7	Pass
CA	50,000 miles	California LEV- II ULEV	НСНО	0.0002	075		0.00001 UP	0.0	75-1	0.000	0.008	Pass
CA	50,000 miles	California LEV- II ULEV	NMOG	0.0089		1.00	0.0006 UP	0.0022		0.012	0.040	Pass
CA	50,000 miles	California LEV- II ULEV	NOX	0.018			0.003 UP	0.0		0.02	0.05	Pass
CA	120,000 miles	California LEV- II ULEV	co	0.10	-	;	0.0047 UP	0.07		0.2	2.1	Pass
CA	120,000 miles	California LEV- II ULEV	CREE	376	32	122	0 UP	0		376		228
CA	120,000 miles		НСНО	0.0002		-	0.00001 UP	0.0001	-	0.000	0.011	Pass
CA	120,000 miles		NMOG	0.0089	955	1.00	0.0006 UP	0.0055	77.1	0.015	0.055	Pass
CA	120,000 miles	00000000000000000000000000000000000000	NOX	0.018	5. <del>11</del>		0.003 UP	0.0	** :	0.02	0.07	Pass

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Test Group			DMBXV03.0U2B			Evaporativ	e/Refueling Fa	mily		N/A		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	120,000 miles	California LEV- II ULEV	PM	0.001	:- <del></del>		0.0012 UP	0.00008	:	0.00	0.01	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Test # BMBX10009177 Test Procedure 11 - Cold CO

Exhaust Test # for this Evap Test N/A Test Fuel Type 19 - Cert Diesel 7-15 ppm Sulfur

**Test Date** 12/09/2009 **Fuel** N/A

Vehicle Class N/A DF Type Mfr. Determined

Verify Test Lab ID Abgashaus Untertuerkheim

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	621.1	
Bag 1 Fuel Economy	16.32	16.32
Bag 2 Carbon Dioxide	452.2	
Bag 2 Fuel Economy	22.5	22.5
Bag 3 Carbon Dioxide	364.8	
Bag 3 Fuel Economy	27.89	27.89
Carbon Monoxide	0.283	
Manufacturer Fuel Economy	21.9445	21.9445
Total Hydrocarbon	0.03241	

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	463.16	

**Manufacturer Test Comments** 

ColdCO for Litmus, added Bag results

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Test Group	DMBXV03.0U2B	Evaporative/Refueling Family	N/A
Test #	BMBX10008851	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	19 - Cert Diesel 7-15 ppm Sulfur
Test Date	12/17/2009	Fuel	Diesel
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Abgashaus Untertuerkheim		

**Test Results** 

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Carbon Monoxide	0.0051	
Manufacturer Fuel Economy	45	45
Nitrogen Oxide	0.0015	
Non-methane Hydrocarbon	0.00039	***
Total Hydrocarbon	0.0093	

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	226	226

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	225.55	226

**Manufacturer Test Comments** 

Mfr FE added, FE bag 1 added CREE added

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 2 Bin 5	NOX	0.002		-	0.003 UP	0.0		0.00	0.07	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	CREE	226			0 UP	0		226		**
Fed	120,000 miles	Federal Tier 2 Bin 5	NOX	0.002		1	0.003 UP	0.0		0.00	0.09	Pass
CA	50,000 miles	California LEV- II ULEV	NOX	0.002		-	0.003 UP	0.0		0.00	0.07	Pass
CA	120,000 miles	California LEV- II ULEV	CREE	226	977	II	0 UP	0		226	7754	-53.6
CA	120,000 miles	California LEV- II ULEV	NOX	0.002			0.003 UP	0.0		0.00	0.09	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

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Test Group	DMBXV03.0U2B	Evaporative/Refueling Family	N/A
Test#	BMBX10009176	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	19 - Cert Diesel 7-15 ppm Sulfur
Test Date	12/16/2009	Fuel	Diesel
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Abgashaus Untertuerkheim		
Test Results			

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	580.6	-
Bag 1 Fuel Economy	17.53	17.53
Bag 2 Carbon Dioxide	310.8	
Bag 2 Fuel Economy	32.73	32.73
Carbon Monoxide	0.007	-
Manufacturer Fuel Economy	27.4409	27.4409
Nitrogen Oxide	0.06969	
Non-methane Hydrocarbon	0	#
Particulate Matter	0.00246	en:
SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	0.06969	#"

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	370.8	22

0.0049

#### **Manufacturer Test Comments**

Total Hydrocarbon

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	4,000 miles	Federal Tier 2 Bin 5	СО	0.01	-	=	0.0047 UP			0.0	8.0	Pass
Fed	4,000 miles	Federal Tier 2 Bin 5	HC-NM+NOX	0.070	K <del></del>		0.0036 UP	: <del></del>		0.07	0.14	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	СО	0.01	()##		0.0047 UP	0.07	-	0.1	11.1	Pass
CA	4,000 miles	California LEV- II ULEV	СО	0.01	24	-	0.0047 UP			0.0	8.0	Pass
CA	4,000 miles	California LEV- II ULEV	HC-NM+NOX	0.070			0.0036 UP			0.07	0.14	Pass

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Test Group	DMBXV03.0U2B	Evaporative/Refueling Family	N/A
Test #	BMBX10009257	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	19 - Cert Diesel 7-15 ppm Sulfur
Test Date	04/16/2010	Fuel	Diesel
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Abgashaus Untertuerkheim		
Test Results			

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Carbon Monoxide	0.00885	(at)
Manufacturer Fuel Economy	22.9	22.9
Nitrogen Oxide	0.0964	
Non-methane Hydrocarbon	0	
Particulate Matter	0.00129	
SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	0.0964	
Total Hydrocarbon	0.01432	

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	443.987	(##)

**Manufacturer Test Comments** 

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	4,000 miles	Federal Tier 2 Bin 5	CO	0.01	75	-	0.0047 UP	W.	-	0.0	2.7	Pass
Fed	4,000 miles	Federal Tier 2 Bin 5	HC-NM+NOX	0.096			0.0036 UP		I	0.10	0.20	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	СО	0.01	-	3.00	0.0047 UP	0.07		0.1	3.7	Pass
CA	4,000 miles	California LEV- II ULEV	СО	0.01		ic <del>én</del>	0.0047 UP		:	0.0	2.7	Pass
CA	4,000 miles	California LEV- II ULEV	HC-NM+NOX	0.096	-	3#	0.0036 UP	**		0.10	0.20	Pass

# Mercedes-Benz US

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Test Group	DM		Evaporative/Refueling Family N/A								
			Consolid	ated List of St	andards						
Exhaust Standard	ls										
Cert Region	Cal	ifornia + CAA Section	177 states	Cert/In-l	Use Code		Bot	h			
Vehicle Class	LD	V/Passenger Car		Standard	i Level		Cali	fornia LEV-II UL	EV		
Fuel	Die	esel		Test Pro	cedure		SCO	03			
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF			
4,000 miles	CO				0.0047	0			2.7		
4,000 miles	HC-NM+NOX	-	-		0.0036	0	**		0.20		
Cert Region	Cal	ifornia + CAA Sectior	177 states	Cert/In-	Use Code		Bot	h			
Vehicle Class	LD	V/Passenger Car		Standard	l Level		Cali	fornia LEV-II UL	EV		
Fuel	Die	esel		Test Pro	cedure		CV	S 75 and later (w/c	can. load)		
		Rounded		NMOG /	Upward Diesel Adjustment	Downward Diesel Adjustment					
Useful Life	Emission Name	Result	RAF	NMHC	Factor	Factor	Mult DF	Add DF	Std		
50,000 miles	CO				0.0047	0		0.03	1.7		
50,000 miles	НСНО				0.00001	0		0.0	0.008		
50,000 miles	NMOG			1.00	0.0006	0		0.0022	0.040		
50,000 miles	NOX	-	122		0.003	0		0.0	0.05		
120,000 miles	CO			**	0.0047	0		0.07	2.1		
120,000 miles	CREE	-	-		0	0		0	999		
120,000 miles	HCHO		(144		0.00001	0	744	0.0001	0.01		
120,000 miles	NMOG		1.55	1.00	0.0006	0		0.0055	0.05		
120,000 miles	NOX				0.003	0		0.0	0.07		
120,000 miles	PM	**	, <del>11</del>	. HA	0.0012	0	**	0.00008	0.01		
Cert Region	Cal	ifornia + CAA Section	177 states	Cert/In-l	Use Code		Bot	h			
Vehicle Class	LD	V/Passenger Car		Standard	i Level		Cali	fornia LEV-II UL	EV		
Fuel	Die	esel		Test Pro	cedure		HW	FE			
		Rounded	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std		
Useful Life	Emission Name	Result							.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Useful Life	Emission Name	Result		_	1				0.07		
Useful Life 50,000 miles 120,000 miles	Emission Name NOX CREE	Result 			0.003	0		0.0	0.07 999		

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# Mercedes-Benz

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Test Group	DM	3XV03.0U2B		Evapora	tive/Refueling Fam	ily	N/A			
Cert Region         Federal           Vehicle Class         LDV/Pas           Fuel         Diesel		//Passenger Car	Cert/In-Use Code Car Standard Level Test Procedure				Both Federal Tier 2 Bin 5 US06			
Useful Life	Emission Name	Rounded Result	RAF	NMOG/ NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
4,000 miles	CO	-			0.0047	0			8.0	
4,000 miles	HC-NM+NOX	**	::ee		0.0036	0			0.14	
120,000 miles	СО		o 4 <del>57</del>		0.0047	0		0.07	11.1	
Cert Region Vehicle Class Fuel	Fede LDV Dies	//Passenger Car		Cert/In- Standar Test Pro			Bot Fed SCC	eral Tier 2 Bin 5		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
4,000 miles	CO				0.0047	0			2.7	
1.000 '1	HC-NM+NOX		: <del>: :</del>		0.0036	0			0.20	
4,000 miles					0.0047	0	100	0.07	3.7	
4,000 miles 120,000 miles	СО				0.00 17					
	Cali	fornia + CAA Section //Passenger Car	ı 177 states	Cert/In- Standar Test Pro	Use Code d Level		Bot Cali USO	ifornia LEV-II ULE	ïV	
120,000 miles  Cert Region Vehicle Class	Cali LDV	fornia + CAA Section //Passenger Car	n 177 states	Standar	Use Code d Level	Downward Diesel Adjustment Factor	Cali	ifornia LEV-II ULE	V Std	
120,000 miles  Cert Region  Vehicle Class  Fuel	Cali LD <sup>v</sup> Dies	fornia + CAA Section //Passenger Car el Rounded		Standard Test Pro NMOG /	Use Code d Level cedure Upward Diesel Adjustment	Downward Diesel Adjustment	Cali USG	ifornia LEV-II ULE 06		





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Jaie. 09/20/2012 01.	46.18 AW		Certificatio	n Summar y 11	noi mation Kep	ort			
Test Group	DMI	3XV03.0U2B		Evapora	tive/Refueling Fam	ily	N/A	1	
Cert Region Vehicle Class Fuel	Federal LDV/Passenger Car Diesel			Cert/In-Use Code Standard Level Test Procedure			Both Federal Tier 2 Bin 5 CVS 75 and later (w/o can. load		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	СО			##0	0.0047	0	***	0.03	3.4
50,000 miles	HCHO				0.00001	0		0.0	0.015
50,000 miles	NMOG			1.00	0.0006	0	44	0.0022	0.075
50,000 miles	NOX	****	-		0.003	0		0.0	0.05
50,000 miles	PM				0.0012	0		0.00003	0.01
120,000 miles	CO	**			0.0047	0		0.07	4.2
120,000 miles	CREE	-		7-4	0	0		0	999
120,000 miles	HC-NM+NOX-COMP				0.0036	0		0.0055	0.65
120,000 miles	НСНО		-		0.00001	0		0.0001	0.018
120,000 miles	NMOG	***		1.00	0.0006	0	===	0.0055	0.090
120,000 miles	NOX				0.003	0		0.0	0.07
120,000 miles	PM		. <del></del> .		0.0012	0		0.00008	0.01
120,000 miles	PM-COMP				0.0012	0		0.00008	0.07
Cert Region Vehicle Class Fuel	Federal LDV/Passenger Car Diesel			Cert/In-Use Code Standard Level Test Procedure			Both Federal Tier 2 Bin 5 HWFE		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	NOX	2-1		2.0	0.003	0	227	0.0	0.07
120,000 miles	CREE		**>:		0	0	<del></del> :	0	999
120,000 miles	NOX				0.003	0		0.0	0.09

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### Certification Summary Information Report

Test Group	DMBXV03.0U2B	Evaporative/Refueli	ing Family N/A					
Glossary								
Useful Life								
4	4,000 miles	120	120,000 miles					
50	50,000 miles	150	150,000 miles					
100	100,000 miles							
Emission Name								
HC-TOTAL	Total Hydrocarbon	FE BAG 2	Bag 2 Fuel Economy					
CO	Carbon Monoxide	FE BAG 3	Bag 3 Fuel Economy					
CO2	Carbon dioxide	FE BAG 4	Bag 4 Fuel Economy					
CREE	Carbon-Related Exhaust Emissions	MFR FE	Manufacturer Fuel Economy					
OPT-CREE	Optional Carbon-Related Exhaust Emissions	HC	Hydrocarbon for Running Loss and ORVR					
NOX	Nitrogen Oxide	METHANE	CH4 - Methane					
PM	Particulate Matter	METHANOL	CH3OH - Methanol					
PM-COMP	SFTP Composite Particulate Matter	N2O	Nitrous Oxide					
HC-NM	Non-methane Hydrocarbon	SPITBACK	Spitback Hydrocarbon in grams					
OMHCE	Organic material Hydrocarbon Equivalent	AMP-HRS	Integrated Amp-hours					
OMNMHCE	Organic material non-methane HC equivalent	START-SOC	System Start State of Charge Watt-hours					
NMOG	Non-methane organic gas (California)	END-SOC	System End State of Charge Watt-hours					
НСНО	Formaldehyde	ACT-DISTANCE	Actual Distance Driven (miles)					
H3C2HO	Acetaldehyde	AS-VOLT	Average System Voltage					
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	CO2 BAG 1	Bag 1 Carbon Dioxide					
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	CO2 BAG 2	Bag 2 Carbon Dioxide					
CO-COMP	SFTP Composite Carbon Monoxide	CO2 BAG 3	Bag 3 Carbon Dioxide					
ETHANOL	C2H5OH - Ethanol	CO2 BAG 4	Bag 4 Carbon Dioxide					
FE BAG 1	Bag 1 Fuel Economy							
Certification Region								
CA	California + CAA Section 177 states	FA	Federal					
Exhaust Emission Star	ndard Level							
B1	Federal Tier 2 Bin 1	HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)					
B2	Federal Tier 2 Bin 2	HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)					
B3	Federal Tier 2 Bin 3	L2	California LEV-II LEV					
B4	Federal Tier 2 Bin 4	L2OP	California LEV-II LEV Optional					
B5	Federal Tier 2 Bin 5	U2	California LEV-II ULEV					
B6	Federal Tier 2 Bin 6	S2	California LEV-II SULEV					
B7	Federal Tier 2 Bin 7	ZEV	California ZEV					
B8	Federal Tier 2 Bin 8	OT	Other					
B9	Federal Tier 2 Bin 9	T1	Federal Tier 1					
B10	Federal Tier 2 Bin 10	PZEV	California PZEV					
B11	Federal Tier 2 Bin 11							

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Test Group	DMBXV03.0U2B	Evaporative/Re	efueling Family N/A
Transmission Ty	pe Code		
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual
A	Automatic	OT	Other
AM	Automated Manual	SA	Semi-Automatic
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)
Drive System Co	de		
4	4-Wheel Drive	P	Part-time 4-Wheel Drive
F	2-Wheel Drive, Front	A	All Wheel Drive
R	2-Wheel Drive, Rear		
Additional Term	s and Acronyms		
AFC	Alternative Fuel Converter	ICI	Independent Commercial Importer
CSI	Certificate Summary Information	ORVR	Onboard Refueling Vapor Recovery
DF	Deterioration Factor	SIL	Shift Indicator Light
Evap	Evaporation, Evaporative	Trans	Transmission

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### S-08: Statements

Please refer to the common application for certification.

### S-09: OBD-System Information

The OBD approval is listed in specific section 14.

### S-10: Alternate Fuel (if applicable)

This test group does not cover flexible or dedicated alternate fuel vehicles.

### S-11: List of AECD

Please refer to S-16 for a detailed description of AECDs including functional explanations.

## S-12: Identification and Description of certified vehicles

The identification and description of all vehicles covered by the certificate is given

- in section 02 (common) for exhaust purposes
- in section 03 (common) for evaporative/refueling families.

All appropriate test parameters necessary to conduct an official certification exhaust or evaporative emission test are provided in sections 07 or 17.

# S-13: Projected US vehicle sales

Please refer to the common application for certification.



## S-14: Request for Certificate

S-14-01: Request for Certificate

Mercedes-Benz requests that EPA issues a certificate of conformity and that ARB issues an executive order for the test group listed on the cover page of this application.

The applicable test results are listed in section 07. The test group complies with all applicable regulations contained within 40 CFR Part 86. The application is current as of this date.

Markus Loesch

Note: Compliance statements are listed in the common section 08.

S-14-02: OBD approval

For OBD approval see confidential section (S-16)



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S-14-03: Fee filing form

EPA Form 3520-29 OMB Control No. 2060-0545	
U.S. ENVIRONMENTAL PROTECTION AGENCY  MOTOR VEHICLE AND ENGINE COMPLIANCE PROGRAM  ON-HIGHWAY FEE FILING FORM  FOR CERTIFICATION APPLICATIONS RECEIVED IN CALENDAR YEAR 2012  Manufacturer Name Mercedes-Benz USA, LLC.  Address One Mercedes Drive	
City/State/Zip Code/Country Montvale, NJ 07645	
On-Highway Certification Request Type (check one)  LDV/LDT/MDPV/HDV (Chassis cert) FEDERAL (\$32,678)	1444
EPA standard family or test group name:	2 B
Amount paid (U.S. Funds Only):  Enter the check number, or the statement "WIRE" or "ACH":  WIRE	
Reduced Fee Section (40 CFR \$1027.120)  Reduced fee calculation (minimum initial payment \$750): Total number of vehicles/units covere Aggregate retail sales price of the vehicles/units: \$ x 1% = \$  Check box if an Independent Commercial Importer:   List the VIN of imported vehicles/engines	
Company Representative: R-Thomas Brunner  Title: Manager, VCA Dept. Phone/Fax: 201.573.2622 /201.476.2866 Date: 02 / 36 / 201:  E-mail Address: r-thomas.brunner@mbusa.com  Submission of payments and forms:  (1) Online: Forms may be found and submitted with or without payments online at www.Pay.gov.  (2) By mail: For check payments only, send checks and this form to:	
Environmental Protection Agency Motor Vehicle and Engine Compliance Program P.O. Box 979032 St. Louis, MO 63197-9000  (3) Transmit offline Wire payments to the New York Federal Reserve Bank. (See Instructions, p. (4) Transmit offline ACH payments to the Federal Reserve Bank of Cleveland. (Instructions, p.	
(5) Forms not submitted under (1) and (2) above can be sent as email attachments to Fees@epa. Forms and payments sent in ways other than the above may be delayed or ineffective. See the Instructions for sending checks and forms by private mail service (e.g., Federal Express).  The public reporting and recordkeeping burden for this collection of information is estimated to average 18 minutes per response. Send com on EPA's need for this information, the accuracy of the provided burden estimate, and any suggested methods for minimizing respondent burden estimate.	gov.
including through the use of automated collection techniques, to the Director, Collection Strategies Division, U.S. Environmental Protection (2822T), 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not sencompleted Form 3520-29 to this address.  This form expires: 1/1/2013	





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S-14-04: Approval Letters low ash oil



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY 2565 PLYMOUTH ROAD ANN ARBOR, MICHIGAN 48105-2498

> OFFICE OF AIR AND RADIATION

September 27, 2005

RECEIVED

OCT 0 7 2005

R. R. MODLIN

Mr. Reginald Modlin
Director, Environmental and Energy Planning
DaimlerChrysler Corporation
800 Chrysler Drive
Auburn Hills, MI 48326-2757
CIMS 482-00-71

Mr. Modlin,

Thank you for your August 30, 2005 letter regarding DaimlerChrysler's desire to use low ash content engine oil to certify your clean light-duty diesel vehicles. As you correctly noted in your letter, EPA Guidance Documents CCD-01-12 (Use of GF-3 Engine Oil in Test Vehicles) and CCD-04-07 (Use of GF-4 Engine Oil in Certification and Fuel Economy Test Vehicles) are the basis for how EPA determines how to deal with unique engine oils with respect to certification and fuel economy testing.

EPA agrees that the use of low ash content engine oil (0.8%) will be beneficial to allowing new advanced particulate filter systems to meet their full potential for performing over the full useful life of the vehicles. Our primary concern with manufacturer's request to certify with unique engine oils is that these oils be readily available to consumers. We realize that the number of light-duty diesel vehicles in the U.S. is low and that the demand for clean light-duty diesel engine oil is also low and that it will be initially difficult to establish widespread distribution of low ash oil.

The plan proposed by DaimlerChrysler for the use and certification of low ash content engine oil, which includes the availability of the low ash engine oil at the 4,300 DaimlerChrysler dealerships in the U.S., the investigation of the potential for making the engine oil available through automotive aftermarket retail chains (Auto Zone, NAPA, etc.) through DaimlerChrysler's MOPAR aftermarket organization, and the continued work with oil manufacturers to market the oil through their outlets and promote the use of the oil at "quick oil change" facilities, appears to be reasonable. Therefore, we are approving DaimlerChrylser's plan to use low ash content engine oil for the certification of light-duty diesel vehicles.



<b>(A)</b>	us	MY 2013	Application for Certification	Issue Date	Rev Date	DMBXV03.0U2B
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Please let me know if you any additional questions. You can contact me at 734-214-4286.

Sincerely,

Linc Wehrly

Compliance and Innovative Strategies Division Office of Transportation and Air Quality

# S-15: HEV-specific data (if applicable)

No Hybrid Electric Vehicles (HEV) is part of this test group.